

## Example 1.

Fig. 8 shows a schematic arrangement of an exemplary magnetic recording apparatus according to a second embodiment of the present invention as viewed from a position thereover.

Fig. 9 shows a sectional view as viewed in a direction of A-A' illustrating the magnetic recording apparatus shown in Fig. 8.

Fig. 10 shows a schematic sectional view illustrating a magnetic disk produced in a third embodiment of the present invention.

Fig. 11 shows graphs illustrating a hysteresis loop (major loop) of the magnetic disk shown in Fig. 10, and a magnified view of a minor loop of the hysteresis loop.

Fig. 12 shows a schematic sectional view illustrating a modified embodiment of the magnetic disk according to the third embodiment of the present invention.

Fig. 13 shows a schematic sectional view illustrating another modified embodiment of the magnetic disk according to the third embodiment of the present invention.

Fig. 14 shows a graph illustrating a hysteresis loop (major loop) of a magnetic disk according to a fourth embodiment.

Fig. 15 shows a graph illustrating a relationship between a film thickness of a lattice spacing-adjusting layer and a coercive force of a recording layer and a relationship between the film thickness of the lattice spacing-adjusting layer and an exchange coupling magnetic field concerning the magnetic disk according to the fourth embodiment.

Fig. 16 schematically shows a minor loop of the hysteresis loop shown in Fig. 14.

Fig. 17A shows a graph illustrating the change of exchange coupling energy with respect to the ferromagnetic atom (Co) concentration of a ferromagnetic atom-rich layer, and Fig. 17B shows a graph illustrating the change of  $(K_u \bullet V)/k_B \bullet T$  with respect to the ferromagnetic atom (Co) concentration of the ferromagnetic atom-rich layer.

Fig. 18 shows a sectional view illustrating a structure of a conventional magnetic disk.